ABSTRACT OF THE DISCLOSURE

A magnetic resonance imaging receiver/transmitter coil system for providing images for regions of interest includes a first phased array formed of a plurality of electrically conductive members and defining an array volume and a second phased array formed of a second plurality of electrically conductive members and disposed at least partially within the defined array volume. At least one of the first and second phased arrays is adapted to apply a magnetic field to the defined array volume. At least one of the first and second phased arrays is further adapted to receive said applied magnetic field. The first phased array is extendible to define a further array volume and is provided with a switch for electrically coupling and decoupling an extension to effectively extend the length of the first phased array and thereby define the further array volume. In this manner the length of the first phased array is effectively extended to approximately twice its unextended length.